

What Is Claimed Is:

1. A computer-usable storage media storing a software routine to enable a computer-based telecommunications system to perform the following
5 functions: to use a service node/intelligent peripheral (SN/IP) of the system to monitor incoming data to determine whether the incoming data is subscriber data, to use the SN/IP to send a message to a switching control point (SCP) of the system indicating the presence of
10 subscriber data, to use the SCP to send a message to a service switching point (SSP) of the system that instructs a connection to the subscriber, to use the SSP to establish the connection, and to use the SN/IP to format the subscriber data into a CID (caller
15 identification) format and deliver the formatted subscriber data to CID-enabled customer premises equipment (CPE) of the subscriber.

2. The storage media of Claim 1, wherein the
20 routine is performed by more than one node of the system.

3. The media of Claim 1, wherein the CID- format is an 8-bit word data stream.

25 4. The media of Claim 1, wherein the system transmits the information to the CPE at predetermined intervals.

5. The media of Claim 1, wherein the system
30 transmits the information to the CPE in response to a change in the information.

6. The media of Claim 1, wherein the system transmits the information to the CPE after at least one ring of the CPE.

5 7. The media of Claim 1, wherein the routine further enables the system to monitor for an interrupt key from the CPE.

8. The media of Claim 1, wherein the SN/IP monitors
10 incoming data for voice mail of the subscriber.

9. The media of Claim 1, wherein the SN/IP monitors incoming data for email of the subscriber.

15 10. The media of Claim 1, wherein the SN/IP monitors for missed calls to the subscriber.

11. The media of Claim 1, wherein the routine further enables the CPE to display a menu of information
20 choices.

12. The media of Claim 1, wherein the CID format follows a common channel signaling (CCS) protocol.

25 13. The media of Claim 1, wherein the SN/IP delivers the data to the CPE via the SCP and SSP.

14. The media of Claim 1, wherein the routine further enables the SN/IP to receive input from the
30 customer via the Internet that determines what incoming data is for that customer.

15. A computer-usable storage media storing a software routine to enable a service node/intelligent peripheral (SN/IP) of a computer-based telecommunications system to perform the following functions: to monitor
5 incoming data to determine whether the incoming data is for a subscriber, to send a message to a switching control point (SCP) of the system indicating the presence of customer data, to connect to the subscriber in response to a message from a service switching point
10 (SSP) of the system, to format the data into a CID (caller identification data) format, and to deliver the data to the subscriber.

16. In a system having an originating service switching point (SSP), a signaling transfer point (STP), a service node/intelligent peripheral (SNIP) and a switching control point (SCP), a method for providing
5 information over a telephone network comprising:
automatically connecting email information for storage in a service node;
configuring a customer premises equipment (CPE) to receive and output a caller identification (CID) message;
10 connecting said SSP to said service node; and
providing non-CID data in said CID message from said SNIP to said CPE for output by said CPE, said non-CID data including said email information.

17. In a system having an originating service
switching point (SSP), a signaling transfer point (STP),
a service node/intelligent peripheral (SNIP) and a
switching control point (SCP), a method for providing
5 information over a telephone network comprising:

receiving, at the SNIP, a subscriber's selection of
message data to be delivered to the subscriber;
using the SNIP to store the message data;
configuring a customer premises equipment (CPE) to
10 receive and output a caller identification (CID) message;
connecting said SSP to said SNIP; and
providing the message data in CID format from said
SNIP to said CPE for output by said CPE.

15 18. The method of Claim 17, wherein the receiving
step is performed using a computer Internet connection.

19. The method of Claim 17, wherein the receiving
step is performed using the CPE.

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20. A system having an originating service switching point (SSP), a signaling transfer point (STP), a service node/intelligent peripheral (SNIP) and a switching control point (SCP), the system for providing
5 access to an information service over a telephone network comprising:

a customer premise equipment (CPE) selectably in communication with said SSP, said CPE configured to receive a dial tone when said CPE is off-hook;

10 a service node in communication with said SSP, said service node adapted to automatically receive and store content from said information service; and

a processor adapted to enable said SNIP to provide said content as continuous audio instead of said dial
15 tone to said CPE when said CPE is off-hook;

wherein the content represents notification of email.

21. A system having an originating service switching point (SSP), a signaling transfer point (STP), a service node/intelligent peripheral (SNIP) and a switching control point (SCP), the system for providing
5 access to an information service over a telephone network comprising:

a customer premise equipment (CPE) selectably in communication with said SSP, said CPE configured to receive a dial tone when said CPE is off-hook;

10 a service node in communication with said SSP, said service node adapted to automatically receive and store content from said information service and further adapted to receive input from a subscriber to the information service representing the subscriber's choice of content;
15 and

a processor adapted to enable said SNIP to provide said content as continuous audio instead of said dial tone to said CPE when said CPE is off-hook.

20 22. The system of Claim 21, wherein the input from the subscriber is via the Internet.

23. The system of Claim 21, wherein the input from the subscriber is via the CPE.